Kickapoo Tribal Drinking Water System
Consumer Confidence Report
Covering Calendar Year – 2012

This document is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are made to continually improve their drinking water systems. To learn more about your drinking water, please attend any of the regularly scheduled Tribal Council meetings. Please check the Tribal Office for the monthly meeting schedule dates and times. For more information about this report please contact, **Jim Conklin at 785-486-2773.**

Your drinking water source is the surface water of the Delaware River. Your water is treated with chloramines for disinfection against microbial contaminants.

The Safe Drinking Water Act (SDWA) required the primacy agency to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The Indian Health Service has completed an assessment of your source water. For detailed results of the assessment, please contact **Jim Conklin at 785-486-2773.**

Some people may be more vulnerable to contaminates in drinking water than the general population. Immuno-compromised persons such as those with cancer under going chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminates in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of **4** samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. Coliforms were found in more samples than allowed and this was a warning of potential problems.

The Kickapoo Tribal Drinking Water System and Region 7 EPA monitored for *Cryptosporidium* in the source water from the Delaware River from October 2008-October 2009. A series of 13 samples were taken with no *Cryptosporidium* detected in the source water from the Delaware River or from the finished water. *Cryptosporidium* is a microbial pathogen sometimes found in surface water throughout the U.S. None was found in the source water or the finished water of the Kickapoo Tribal Drinking Water System.

Required Health Effects Language

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with the service lines and home plumbing. The Kickapoo Tribal Drinking Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using your water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gpv/safewater/lead.

Sanitary Survey Results

The EPA performed a Sanitary Survey March 14-15, 2012, of the Kickapoo Tribal Drinking Water System. No significant deficiencies were found during the Sanitary Survey.

Water Quality Data

The tables following below list all of the drinking water contaminants, which were detected during the 2012 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2012. EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Treatment Technique (TT): a required process intended to reduce levels of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l).

Parts per Billion (ppb) or micrograms per liter (µg/l).

PicoCuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Testing Results for: Kickapoo Tribal Drinking Water System

Microbiological Contaminants	Result	MCL	MCLG	Typical Source
Total Coliform / Fecal Coliform	2 positive TCR samples 0 positive E-coli sample	No more than one positive sample per month. All re-sampling was negative for TCR.	0	Naturally occurring in the environment

Microbiological Contaminants	Level Found	Range of Detection	MCL	MCLG	Typical Source
Turbidity (NTU)	3.9	0.72-3.9	Treatment Technique	NA	Soil runoff.
Turbidity (% meeting standards)	100%	100%	Treatment Technique	NA	Soil runoff.
Turbidity is a measure of the cloudiness of the source water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 5 NTU in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above the highest recorded turbidity result was 3.9 and the lowest monthly percentage of samples meeting the turbidity limit was 100%, therefore there were no violations of the turbidity limit set by the EPA.					
Total Organic Carbon*	*Complete data not available	*Complete data not available	Treatment Technique	NA	Naturally present in the environment.
The value reported under "Level Found" for Total Organic Carbon (TOC), is the lowest ratio between percent of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1.0 indicates that the water system is in compliance with the TOC removal requirements. A value of less than 1.0 indicates a violation of the TOC removal requirements.					

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	June 2012	1.6	1.6	ppb	10	0	Erosion of natural deposits
ATRAZINE	Quarterly	1.3	0.3-1.3	ppb	3	3	Runoff from herbicide used on row crops
ALACHLOR	Quarterly	0.2	0.2-0.2	ppb	2	2	Runoff from herbicide used on row crops
BARIUM	June 2012	0.17	0.17	ppm	2	2	Discharge from metal refineries;
CHROMIUM	June 2012	2.2	2.2	ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	June 2012	0.19	0.19	ppm	4	4	Erosion of natural deposits. Water additive.
NITRATE	June 2012	0.1	0.1	mg/L	10	10	Runoff from fertilizer use
SELENIUM	June 2012	2.5	2.5	ppb	50	50	Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	Quarterly	48	28.1-48.0	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	Quarterly	51	33.0-51.0	ppb	80	0	By-product of drinking water disinfection

Under the Stage 2 Disinfection Byproducts Rule, the Kickapoo Tribal Water System was required by the EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2014. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Total Haloacetic Acids (HAA5). EPA sets standards for controlling the levels of disinfectants and disinfection byproducts in drinking water, including both TTHM and HAA5. The IDSE Study will be completed in 2013 and results will be included on the 2013 CCR.

Disinfection Byproducts IDSE Study Data	Monitoring Period	Highest Average	Range	Unit	MCL	MCLG	Typical Source
IDSE TTHMs	Quarterly at 2 locations	75	66-83	ppb	80	0	By-product of drinking water disinfection
IDSE HAA5	Quarterly at 2 locations	37	31-42	ppb	60	0	By-product of drinking water disinfection

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Gross Alpha	May 2009	2.1	2.1	pCi/L	15	0	Erosion of natural deposits
Radium-226	May 2009	ND	ND	pCi/L	5	0	Erosion of natural deposits
Radium-228	May 2009	1.5	1.5	pCi/L	5	0	Erosion of natural deposits

Lead and Copper	Monitoring Period	90TH Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	October 2011	0.10	0.015-0.66	ppm	1.3	None	Corrosion of household plumbing systems
LEAD	October 2011	1.9	ND-4.6	ppb	15	None	Corrosion of household plumbing systems

During the 2012 calendar year, we had the below noted violation(s) of drinking water regulations.
Monitoring Violations - * Notice of Violation issued by Region 7 EPA 12/18/12 for lack of Total Organic Carbon sampling January-April 2012 and October 2012. Lack of sampling for five months in 2012 has resulted in the inability to calculate compliance with the TOC removal ratio for the year.

MCL Violations and Treatment Technique Violations - None